

# GUIDANCE FOR COMMUNITY HAZMAT RESPONSE PLANS

## Plans covered by this guidance:

SARA Title III

Michigan Fire Fighter Right-to-Know

MIOSHA Hazwoper for Fire Fighters



This guidance was produced by:  
Michigan Department of State Police, Emergency Management Division in  
Cooperation with the Department of Consumer and Industry Services,  
Bureau of Safety and Regulation.

# TABLE OF CONTENTS

I. INTRODUCTION .....	1
II. PLAN REQUIREMENTS AND RECOMMENDATIONS .....	2 - 3
III. PLAN DEVELOPMENT INSTRUCTIONS	
A. Signature Page.....	4
B. Site address and Owner/Operator Information .....	4
C. Chemicals on Site.....	4
D. Site Map .....	4
E. Vulnerable Zone .....	4
F. Affected Facilities.....	5
G. Site Resources and Procedures .....	5
H. Community Resources and Procedures .....	5
I. Notification.....	5
IV. PLAN DEVELOPMENT WORKSHEETS .....	6 - 10
V. PLANNING RESOURCES.....	11

## ACKNOWLEDGMENTS

This guide was developed by the Department of State Police, Emergency Management Division, Planning and Operations Section, in consultation with local emergency management coordinators, Local Emergency Planning Committees, fire department representatives from around the state, and the Michigan Emergency Planning and Community Right-to-Know Commission. The Michigan Department of Consumer and Industry Services, Bureau of Safety and Regulation, General Industry Safety Division and Occupational Health Division, assisted in reviewing the document for inclusion of Michigan Fire Fighter Right-to-Know recommendations and MIOSHA HAZWOPER requirements.

## I. INTRODUCTION

This guide is arranged so that instructions and explanation of plan requirements are followed by a sample plan (Section IV). The format should be self-explanatory. When completed, the plan development worksheets can be removed, making an easily portable document for first responders.

Completing plans using this format should allow the fire department and/or the LEPC to meet the requirements of SARA Title III (Superfund Amendments and Reauthorization Act), Michigan Fire Fighter Right-to-Know (FFRTK), and MIOSHA Hazardous Waste and Emergency Operations (HAZWOPER), as long as the additional requirements listed under “Fire Fighter Right-to-Know Plans” and “MIOSHA HAZWOPER Plans” identified on page 3, “Plan Requirements,” are developed, implemented and maintained. It is strongly recommended that fire departments refer to the applicable regulations for complete requirements.

SARA Title III requires LEPCs to develop site specific emergency response plans for those sites within their jurisdiction which have one or more "extremely hazardous substances" (EHS) at or above a given threshold quantity. FFRTK requires that the chief of an organized fire department prepare and disseminate to each firefighter a plan for executing the department's responsibilities with respect to each site within their jurisdiction where hazardous chemicals are used or produced. HAZWOPER requires employers (fire departments, in this case) to train all employees who may encounter or respond to a hazardous material incident. All three of these legislative requirements have planning specifications that are similar or overlap. This guidance has been developed to assist fire departments and LEPCs in completing their planning tasks. LEPCs and fire departments can greatly improve their efficiency by working together.

For additional compliance assistance regarding SARA Title III planning activities, contact the Michigan State Police, Emergency Management Division, Planning and Operations Section at (517) 333-5049. Compliance assistance regarding MIOSHA FFRTK and HAZWOPER requirements is available from the Michigan Department of Consumer and Industry Services, Bureau of Safety and Regulation, General Industry Safety Division at (517) 322-1831 and the Occupational Health Division at (517) 322-1608, respectively. This guidance can be used to develop either industrial or farm off-site response plans. The Michigan State University - Extension Bulletin E-2575 is an additional resource for assistance in developing off-site response plans for farms.

**The Emergency Management Division (EMD) will review and comment on plans submitted by Local Emergency Planning Committees (LEPCs) for compliance with SARA Title III requirements only.**

**Local fire departments are responsible for their own FFRTK and HAZWOPER plans and are not required to submit plans to the EMD for review and comment. The format suggested here is optional.**

Pages can be added to this document if the necessary information cannot be included in the space provided. Other documents that include information, which is needed for the Off-site HAZMAT Response Plan, can be referenced, unless they need to be attached to the plan for first responder use.

## **II. PLAN REQUIREMENTS \RECOMMENDATIONS**

### **The following items are required for SARA Title III plans.**

1. A statement or procedures that describes how population protection decisions will be made and implemented for accidental chemical release incidents.
2. A statement or procedure that describes the community's medical response actions in the event of an accidental chemical release in the community.
3. A description of the community's HazMat response procedures and equipment and who maintains the equipment.
4. A description of the community's HazMat responders training schedule.
5. A description of the community's exercise schedule for HazMat sites and the method(s) used for exercising.
6. A list of persons/organizations to contact for assistance (e.g. railroads, DEQ/DNR offices, Drain Commissioners, Road commissions, airports, health departments, police/sheriff, etc.).
7. A statement or procedure on how Mutual Aid will be activated and/or the adjoining LEPC will be contacted, should it become necessary.
8. A list of the known SARA Title III, Section 302 HazMat sites in the Local Emergency Planning Committees (LEPC) geographical area of jurisdiction.
9. Identifies the facility emergency coordinator and emergency telephone number(s).
10. Provides an inventory of extremely hazardous substances at the facility.
11. Identifies the method used to determine the population likely to be affected by a release and identify area affected (the vulnerable zone).
12. Identifies facilities with special populations, such as hospitals, schools, and nursing homes, and identify facilities that may contribute to or are subject to, additional risks due to their proximity to the facility.
13. Identifies provisions for evacuation routes, including alternate routes out of the vulnerable zone if evacuation becomes necessary.
14. Identifies routes over which extremely hazardous substances are transported.
15. Describes the facility's procedures to be followed once a release has been detected.
16. Identifies the hazardous materials expertise and emergency response equipment of the facility, and identifies how the equipment is maintained.
17. Includes procedures for a timely notification of a release by the owner/operator to the local emergency management coordinator and government agencies.



### **Michigan Fire Fighter Right-To-Know Plan Recommendations:**

1. A description of the fire department's HazMat training schedule.
2. A list of persons/organizations to contact for assistance in response.

**Note:** If the above information is included in the site plan by, or in conjunction with, the LEPC, then these planning recommendations are met under SARA Title III requirements.

### **MIOSHA HAZWOPER Plan Requirements:**

1. A statement or policy on lines of authority at the fire department and/or the use of the incident command system.
2. A statement or policy on decontamination procedures.
3. A policy or description of emergency medical and first aid treatment for responders.
4. A procedure for response critique and follow-up.
5. A procedure for personal protective equipment (PPE) use during HazMat incidents.

### **Other items:**

The following items **are not** required but would make a plan stronger and more complete and are strongly recommended for Fighter Right-To-Know Plans.

1. Includes an inventory of other chemicals of concern.
2. Provides a facility location map.
3. Provides a site layout map indicating chemical location.
4. Establish access control procedures and maps access control points and traffic rerouting within the vulnerable zone.
5. Provides contact names and phone numbers for populations of concern, e.g. factories.
6. Identifies shelters in the event an evacuation is needed.
7. Identifies where chemical specific toxicological information can be found.

### III. PLAN DEVELOPMENT INSTRUCTIONS

#### **SIGNATURE PAGE** (Page 6)

It is recommended that the Emergency Management Coordinator and the LEPC Chairperson of the jurisdiction within which the site falls sign this page. It is also recommended that the fire chief of the jurisdiction sign the page if the plan is to be used for Fire Fighter Right-to-Know and/or HAZWOPER purposes. Signatures of all three officials indicate support for development of a safe community.

#### **A. SITE ADDRESS AND OWNER/OPERATOR INFORMATION** (Page 7)

Identify the site name, address, nearest crossroads, and the emergency contacts for the site.

#### **B and C. CHEMICALS ON SITE (EHS and Non-EHS)** (Page 7 – 8)

The plan must include a list of Extremely Hazardous Substances (EHSs) at each site. An EHS is a chemical that has been identified by the Environmental Protection Agency (EPA) as very dangerous to life and health. Site records indicate exact quantities of chemicals.

Farm chemicals, however, are often identified only by product name and it may be difficult to tell if they include an Extremely Hazardous Substance (EHS). Those that do, usually have only a certain percent of an EHS in them. See Section V, “Planning Resources”, for information on commonly used farm chemicals. In addition, the LEPC, Michigan State University Extension, the Michigan State Police Emergency Management Division (Planning and Operations Section), and the Department of Agriculture can be helpful in identifying the make-up of agricultural chemical products.

**List what is stored or used at the site. Include all EHS chemicals as well as other chemicals of concern.**

Material Safety Data Sheets (MSDS) or other similar chemical information sources can provide specific information on the data items requested in this section. For example, primary hazard information (how the chemical affects people and how it can get into a person's system) and response precautions (what responders must watch out for and how they can protect themselves) are usually found in MSDSs.

Non-EHS chemicals are not required for SARA Title III plans, but are recommended for Fire Fighter Right-to-Know plans. However, including them in all plans can be very helpful if accidental chemical mixing during an incident is a possibility.

#### **D . VULNERABLE ZONE** (Page 9)

The method for determining the vulnerable zone and the vulnerable zone itself is required to be specified in the plan. For planning purposes, a vulnerable zone be calculated and identified on a map. It is recommended that both a most likely case and a worst case vulnerable zone be calculated. This will allow responders to be aware of the largest area that could be affected by a release at the site. Several methods for calculation are available, including CAMEO (Computer Aided Management Operations of Emergency Operations), the **North American Emergency Response Guidebook**, **North American Emergency Response Guidebook**, or the manual method suggested in EPA's **Technical Guidance for Hazards Analysis**. The vulnerable should be indicated on a map in the plan. The vulnerable zone map could show other information as well, such as, the

location of the facility, primary and secondary evacuation routes, special populations, etc.

#### **E. SITE MAP (Page 9)**

The site map is recommended for Michigan Fire Fighter Right-to-Know plans. The map should show all building locations and other structures, driveways, geographical and environmental features (wells, ponds, drainage ditches, ground slope, streams, etc.), gates, fences, hydrants, standpipes, or any other items which may be useful landmarks during a response. Building entrances and exits, as well as the building evacuation plan, should also be included. Chemical storage locations should be shown on this map for Fire Fighter Right-to-Know purposes. If an immediately adjacent site or facility poses an additional threat, note that site's location on this map as well. For large sites, it may be necessary to have a map for each section of the site. Add pages, if needed.

#### **F. AFFECTED FACILITIES (Page 10)**

After the vulnerable zone has been determined, identify facilities and populations that would be affected. If this information is not needed (e.g. in the event of a spill that will not go off-site and will not threaten the surrounding population or sensitive areas), write the reason in the appropriate blanks. Information should be provided on nearby special or vulnerable populations (e.g., day care homes, group homes, hospitals, nursing homes, etc.) and on facilities that may contribute risk (e.g., other facilities whose chemicals, if mixed with a release from this site, could cause a greater problem).

#### **G. SITE RESOURCES AND PROCEDURES (Page 10)**

Resources and response procedures available at the site should be indicated in the plan. These items can include: facility resources for responding to a spill, routes used to transport EHSs to and from the site, release detection procedures at the site, and response procedures that site personnel will use in the event of an accidental release (e.g. "call 911" or "follow company chemical spill Standard Operating Procedures (SOP's)").

#### **H. TRANSPORTATION ROUTES (Page 10)**

SARA Title III requires that transportation routes used to transport extremely hazardous substances be identified in the plan. In addition primary and alternate evacuation routes need to be identified. This information can be included on a map.

#### **I. RESOURCES AND PROCEDURES (Page 10)**

Information about fire department response procedures (what are responders qualified to do) and how security will be maintained around the site in the event of an accidental release must be included in the plan. **Note:** If this information is located in the Emergency Operations Plan (EOP)/Emergency Action Guidelines (EAG), or located at the fire department, it must be, at a minimum, referenced in this section where the information can be found.

#### **J. NOTIFICATION (Page 11)**

If an accidental chemical release occurs, certain agencies must be notified. It should be noted that cellular 911 calls might not always go to the correct dispatch center if the caller is near a political boundary or large body of water which allows calls to be more easily transmitted great distances. Therefore, a regular phone emergency contact number may also be needed in the plan. Follow up written notification by the facility is also required. A sample form for this purpose is referenced in Section V, "Planning Resources". The content of these reports is

specified by SARA Title III, and state and local regulations.

A form for fire department use in reporting to the nearest Michigan State Police post is available from the Emergency Management Division (see Section V) and is intended to meet the fire department's reporting requirements under the Michigan Fire Prevention Act (Act 207). The form is also on the Law Enforcement Information Network (LEIN) teletype under ACCHEMICAL.

## (SAMPLE FORMAT)

\_\_\_\_\_  
City/Township/County

### EMERGENCY HAZMAT RESPONSE PLAN

FOR \_\_\_\_\_ Date: \_\_\_\_\_  
Site Name

This plan has been reviewed and approved for response to a hazardous material incident and is consistent with and supplemental to the \_\_\_\_\_ City/County Emergency Operations Plan and other emergency response documents.

_____ LEPC Chairperson Name	_____ Signature (Optional)	_____ Date	_____ Telephone
--------------------------------	-------------------------------	---------------	--------------------

_____ Emerg. Mgmt. Coord. Name	_____ Signature (Optional)	_____ Date	_____ Telephone
-----------------------------------	-------------------------------	---------------	--------------------

_____ Local Fire Chief Name	_____ Signature (Optional)	_____ Date	_____ Telephone
--------------------------------	-------------------------------	---------------	--------------------

#### CHECK ALL THAT APPLY:

- \_\_\_\_\_ This plan has been developed for SARA Title III Off-Site Response Plan purposes
- \_\_\_\_\_ This plan has been developed for Michigan Firefighter Right-to-Know purposes
- \_\_\_\_\_ This plan has been developed for MIOSHA HAZWOPER purposes

**FACILITY 302 SITE ID NUMBER:** \_\_\_\_\_

**A. SITE ADDRESS AND OWNER/OPERATOR INFORMATION**

Site Name: \_\_\_\_\_

Site Address: \_\_\_\_\_

Nearest Crossroads: \_\_\_\_\_

Facility Emergency Coordinator: \_\_\_\_\_ 24 Hr. Phone: \_\_\_\_\_

Emergency Contact Name: \_\_\_\_\_ 24 Hr. Phone: \_\_\_\_\_

(If different from above)

Alternate Contact: \_\_\_\_\_ 24 Hr. Phone: \_\_\_\_\_

Owner Name: \_\_\_\_\_ 24 Hr. Phone: \_\_\_\_\_

Owner Address: \_\_\_\_\_

**B. EHS CHEMICALS ON SITE (ADD PAGES, IF NECESSARY)**

Product Name: \_\_\_\_\_

EHS Chemical Name: \_\_\_\_\_

CAS #: \_\_\_\_\_

Storage Method: \_\_\_\_\_

Average Amount on Site: \_\_\_\_\_

Maximum Amount on Site: \_\_\_\_\_

Months (By Name) Maximum Amount is on Site: \_\_\_\_\_

Initial Evacuation Zone: \_\_\_\_\_

Chemical/Response Information Location: \_\_\_\_\_

Primary Hazard to Response Personnel: \_\_\_\_\_

Response Precautions/Suggested PPE: \_\_\_\_\_

~~~~~

Product Name: \_\_\_\_\_

EHS Chemical Name: \_\_\_\_\_

CAS #: \_\_\_\_\_

Storage Method: \_\_\_\_\_

Average Amount on Site: \_\_\_\_\_

Maximum Amount on Site: \_\_\_\_\_

Months (By Name) Maximum Amount is on Site: \_\_\_\_\_

Initial Evacuation Zone: \_\_\_\_\_

Chemical/Response Information Location: \_\_\_\_\_

Primary Hazard to Response Personnel: \_\_\_\_\_

Response Precautions/Suggested PPE: \_\_\_\_\_

**C. OTHER CHEMICALS OF CONCERN (NON-EHS):**

|  |  |
|--|--|
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**D. DESCRIBE METHOD USED TO DETERMINE VULNERABLE ZONE:**  
(CAMEO/MARPLOT/NORTH AMERICAN GUIDEBOOK, OTHER?)

---

---

---

**VULNERABLE ZONE MAP:**

(This map can also be used to identify transportation, primary evacuation/alternate evacuation routes, special populations, etc. Please label map.)

**E. SITE MAP:**

(Fire Fighter Right-to-Know Requirement)

**F. AFFECTED FACILITIES:**

Nearby Facilities With Special Populations:

**NOTE: Must be listed here or referenced where it can be found**

| Facility Name: | Contact Person: | 24 Hour Phone: |
|----------------|-----------------|----------------|
|                |                 |                |
|                |                 |                |
|                |                 |                |

Nearby Facilities That May Contribute Risk:

**NOTE: Must be listed here or referenced where it can be found.**

| Facility Name: | Contact Person: | 24 Hour Phone: |
|----------------|-----------------|----------------|
|                |                 |                |
|                |                 |                |
|                |                 |                |

**G. SITE RESOURCES AND PROCEDURES:**

**NOTE: Information requested in this section must be provided in this plan. If the information is found elsewhere, a description of where the information is located must be included in this section. Do not leave blank spaces.**

This site has the following equipment and trained personnel available to contain a release: \_\_\_\_\_

Site response equipment maintained by: Site owner Other (specify): \_\_\_\_\_

Chemical Information Location: \_\_\_\_\_

Site Response Procedures: \_\_\_\_\_

\_\_\_\_\_

**H.. Routes Normally Used to Transport EHSs:** \_\_\_\_\_

\_\_\_\_\_

**I.. COMMUNITY RESOURCES AND PROCEDURES:**

Fire Department Response Procedures for this Site: \_\_\_\_\_

\_\_\_\_\_

**Note: If this information is located elsewhere, identify where that information can be found. (e.g. EOP/EAG, police/fire procedures, etc.)**

Site Security Control Procedures:

**Note: If this information is located elsewhere, identify where the information is located. (e.g. EOP/EAG, police/fire procedures, etc.)**

---

**J. NOTIFICATION:**

**Facility personnel must call these numbers :**

Fire Department: \_\_\_\_\_ Local Emerg. Mgt. Coord.: \_\_\_\_\_

State Emergency Response Comm./MDEQ : 1-800-292-4706 (Pollution Emergency Alerting  
System-PEAS hotline)

Department of Agriculture (farm related spills): 1-800-405-0101

National Response Center: 1-800-424-8802

**Fire dept. personnel must call this number (per Act 207, P.A. of 1941, as amended):**

Michigan State Police (nearest post): \_\_\_\_\_

## V. PLANNING RESOURCES

The following reference materials are available from the Michigan State Police, Emergency Management Division (EMD) to assist in the development of Hazmat plans. They can be obtained from the EMD's Planning and Operations Section by calling 517-333-5049.

1. Threshold Planning Quantities for Commonly Used Chemicals in Farming Applications.
2. Example Vulnerable Zone Distances for certain farm chemicals.
3. Emergency Planning for the Farm, Michigan State University - Extension (Extension Bulletin E-2575, available from Extension offices for a nominal fee). Also available from the DEQ website: See item 17 below.
4. Vulnerability Analysis Worksheet.
5. List of Lists, a consolidated list of chemicals subject to the Emergency Planning and Community Right-to-Know Act (EPCRA) and Section 112 ( r )Clean Air Act, as amended.
6. Telephone Switching Stations with Sulfuric Acid - SARA Title III Planning Options.
7. Agricultural Use of Anhydrous Ammonia - SARA Title III Planning Options.
8. Technical Guidance for Hazard Analysis, a USEPA document.
9. LEPCs: Organizing for Success, EMD Pub. 305.
10. Warning, Evacuation and In-Place Protection Handbook, EMD Pub. 304.
11. Hazardous Material Response Team Suggested Recommendations and Capability Assessment, EMD Pub. 307.
12. Site Emergency Planning Workbook (not specific to only hazardous materials), EMD Pub. 602.
13. SARA Title III Emergency Response Plan Submittal Sheet.
14. Calculation of Product Threshold Planning Quantities (TPQ) for Liquid and Dry Products Which Are not Entirely Composed of an Extremely Hazardous Substance (EHS).
15. Follow-up Emergency Notice Form.
16. [www.epa.gov/swerceppo](http://www.epa.gov/swerceppo): Provides information on how to order CAMEO, ALOHA, and LANVIEW "free". It also provides information on Extremely Hazardous Substances (EHS), and access to chemical profiles and health information regarding EHS.
17. [www.deq-ead-sara@michigan.gov](mailto:www.deq-ead-sara@michigan.gov): Information regarding SARA Title III reporting requirements and reports.
18. [www.mspemd.org](http://www.mspemd.org): Provides SARA Title III related information, workbooks, information sheet, SERC information, etc.

NOTE: Staff from the Michigan State Police, Emergency Management Division, Planning and Operations Section are also available to answer questions and offer assistance to LEPCs. They can be contacted at 517-333-5049. Questions can also be faxed to staff at 517-333-4987.